



DECEMBER 2016 UPDATE

Hawaii Departments of Health and Agriculture Team Up to Address Statewide Pesticide Concerns

In response to ongoing community concerns as well as recommendations made by the Kauai Joint Fact Finding Group, the DOH and Hawaii Department of Agriculture (DOA) have launched three key statewide pesticide initiatives currently underway.

1. Environmental Sampling

- *Surface Water Sampling* Expanding upon the 2013-14 DOH/DOA surface water study, DOA has signed a Memorandum of Understanding with United States Geological Survey (USGS) for a \$500,000 surface water quality study. Surface water on Oahu and Kauai will be sampled for pesticides before and during storm events to evaluate whether pesticides are moving offsite at unacceptable levels. Different land uses including, urban, rural, and agricultural will be evaluated. Interim results will be released after the first year of the project. DOH is acting as scientific and technical advisors to the project. DOA has committed to an additional year of sampling building on the results gathered in 2016-17.

Recent Activity 2016:

- ✓ USGS considered 52 candidate sites on Kauai, 100 candidate sites on Oahu for multiple sampling events
- ✓ 23 sites on Kauai and 34 sites on Oahu meet criteria for size of drainage, % land use, previous data, known concerns
- ✓ Sampling underway at 9 sites, using a variety of sampling methods for different conditions
- *Air and Dust Sampling* DOH and DOA recognize that airborne dust and pesticide drift are important community concerns. A pilot study conducted by the University of Hawaii and reported in 2013, did not find pesticides in the air next to seed corn operations at health levels of concern. The Agency for Toxic Substances and Disease Registry (ATSDR) has recently weighed in on this issue. In their response to a citizen's request for a public health assessment, ATSDR concluded that environmental air monitoring is unable to accurately define the extent of a community's exposure to agricultural pesticides due to application variables and weather. Because of the complexity of the issue and the difficulty in gathering definitive ambient air, soil and dust data, we are currently seeking recommendations from the US Environmental Protection Agency (EPA) on how to address community air concerns.

December 2016 Update:

- ✓ Air and dust sampling on hold pending definitive federal guidance
- ✓ Shifting focus to suspected exposure incident sampling to more accurately assess potential community exposures
- *Pesticide Incident Sampling* To more effectively address citizen concerns about harmful pesticide exposures, DOH and DOA are shifting their sampling focus to coordinated, interagency sampling at the time of suspected pesticide exposures to definitively identify potential chemical exposures that may be associated with symptoms experienced.

2. Interagency Emergency Response Exercises for Pesticide Incidents

- *Statewide Pesticide Exercise* The state recognizes that effective interagency response to emergencies begins with preparedness. Strong internal and external working relationships will help ensure public trust and promote an effective interagency response in the event of a high-level pesticide incident. To strengthen and build upon existing relationships and enhance preparedness, DOA and DOH are planning a statewide pesticide exercise through the Hawaii State Emergency Response Commission with other organizations including Fire Departments, HAZMAT, Emergency Medical Services, Department of Education (DOH), Hawaii Occupational Safety and Health (HIOSH) and other county representatives. A proposed scenario involves a pesticide exposure at a school which will include environmental, community and medical response planning, including DOH's Emergency Medical Services Branch. In September, 2016, a proposal for workshops and table top exercises in each county was presented to the Hawaii State Environmental Response Commission.

December 2016 Update:

- ✓ Fire Departments has identified homeowner pesticide misuse as a cause of 911 pesticide calls
- ✓ Through HSERC, worked with Fire Battalion Chief to obtain all malathion nuisance and ambulance calls for Oahu for 2016.
- ✓ Discussions underway with other LEPCs about collaborative approaches to residential pesticide misuse events

3. Public Health Education and Outreach

- *Acute Pesticide Exposures* DOH and EPA support clinician training for acute pesticide exposure to improve outcomes in local communities. EPA has contracted with the nonprofit Migrant Clinicians Network to provide clinical training for acute pesticide recognition and management at Kauai Veterans Memorial Hospital. The training is scheduled for March, 2017. DOH is assisting EPA and will participate in the event.

December 2016 Update:

- ✓ MCN is working with Hawaii Emergency Physician's Association (HEPA) to finalize details for 2nd training on Oahu in March, 2017 with focus on emergency room physicians near farmworkers.
- *Symposium on Children's Environmental Health* Planning is currently underway to host a Symposium on Children's Environmental Health for health care providers in Honolulu in March, 2017. DOH is collaborating with experts at the Pediatric Environmental Health Specialty Unit (PEHSU), and John A Burns School of Medicine, Department of Pediatrics for this event. Guest speakers from UCSF and UC Berkeley will present current research on pediatric environmental health issues including pesticides. Funding is provided by EPA grants to PEHSU and the DOH State Response Program.

December 2016 Update:

- ✓ Symposium scheduled for March, 2017 in Honolulu. Due to demand from physicians and JABSOM Nursing Program, currently increasing event capacity from 60 to 150.
- *Hawaii Poison Center (HPC)* The HPC operates a 24/7 hotline to assist residents and health providers. DOH receives data from the HPC on the number and types of acute pesticide poisonings. The HPC is mandated by legislation and is under the auspices of the Hawaii State Emergency Medical Services and Injury Prevention System Branch. Annually, the center receives over 9,000 information and poisoning exposure calls from residents and health care providers throughout the state. Services are provided free of charge every day of the year, 24 hours a day

by registered nurse specialists, pharmacists, and physicians specially trained in medical toxicology. The center is operated by the Rocky Mountain Poison Center, Denver, Colorado, an accredited regional poison center by the American Association of Poison Control Centers (AAPCC). The HPC toll-free number is 800-222-1222. DOH is working with HPC to offer Hawaii-specific information for callers on how to report and respond to pesticide exposure.

- *Pesticide Poisoning Prevention Services for Households* - Because the vast majority of pesticide exposures reported to Poison Centers nationwide and the Hawaii Poison Center occur in the home, DOA will re-start their "*Pesticide Poisoning Prevention Services for Households*" outreach program to educate families and communities about how to better protect their children and how to reach out for help in the event of potential exposures.
- *EMS/Physician Training on Hazardous Chemicals* Alvin C. Bronstein, MD, DOH EMS & Injury Branch Chief and former Director of the Rocky Mountain Poison Center, held an EMS/Physician Training on Hazardous Chemicals in partnership with Kapiolani Community College and the Louisiana Poison Center that was attended by 40 people, representing all islands. Additional pesticide-specific trainings for each of the counties are currently being developed/considered.
- *Agency for Toxic Substances and Disease Registry (ATSDR)* DOH is conferring with the ATSDR on pesticide-related community health concerns raised on Kauai. In their recent response to a citizen request for a public health assessment ATSDR identified a need for education of the local health care community, and have offered to provide assistance. The ATSDR response is attached.

December 2016 Update:

- ✓ ATSDR response provided to JFF and posted on HEER website for public distribution
- *Birth defects* Director Pressler and her staff traveled to Kauai in August, 2016 to meet with west side physicians to investigate discrepancies they have identified in the birth defects registry report. The birth defects surveillance system in Hawaii is an active surveillance system in which birth defects data are directly abstracted from medical records at hospitals and other medical facilities statewide. Direct reports from doctors are also accepted, and can be an important way to ensure all birth defects cases are recognized and entered.

December 2016 Update:

- ✓ Continued follow up is ongoing with Kauai physicians to get birth information needed to investigate discrepancies.

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